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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,974	02/25/2004	Daniel Davitz	36008.00.0002	4118

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VEDDER PRICE KAUFMAN & KAMMHOLZ
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CHICAGO, IL 60601

EXAMINER

MORILLO, JANEL COMBS

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 10/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/786,974

Applicant(s)

DAVITZ, DANIEL

Examiner

Janelle Combs-Morillo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 9-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 17-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 2, 2005 has been entered.

Claim Objections/Claim Interpretation

2. Claims 1-8 are objected to because of the following informalities: said claims refer to both "consisting essentially of" as well as "comprising" transitional phrases. It is unclear the scope of said claim. For the purposes of this action, claims 1-8 are interpreted in the broadest scope ("comprising"). Clarification is needed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed

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invention. The examiner could not find support (either explicitly or implicitly) for “without further hardening elements and blending elements”. The fact that the instant specification does not mention further additions of said categories of elements does not provide support for a preferred embodiment excluding said categories of elements.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what elements are excluded by the presently claimed categories of “hardening elements” as well as “blending elements”. Appropriate correction is required.

7. Claims 17-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The scope of said claims is unclear because of the use of 3 different transitional phrases when referring to the instant alloy composition- “consisting essentially of”, “comprised of”, and “consisting of”. It is unclear if applicant intended the claim scope to be open or closed. For the purposes of this office action, the examiner has interpreted the claims in the broadest scope, consistent with “comprising” type claim language. If applicant intended for the claim language to be consistent with “consisting essentially of” type claim language, and wherein the hardening element consists of only Cu, the following claim language is suggested by the examiner-

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“17. (amended) A silver-colored, tarnish-resistant, corrosion-resistant alloy consisting essentially of:

92.5-95% by weight silver, the balance of which is an alloy [comprised] consisting essentially of:

approximately 24-34% by weight zinc;

approximately 0.5-1.8% by weight silicon;

optionally 0-8% by weight Sn;

optionally 0.9%±0.05% by weight In;

[and further comprising] a hardening agent consisting of approximately 60-74% by weight copper.”

	instant claim 1		net alloy		claims 4 and 7	net alloy	
	min.	max.	min.	max.		min.	max.
Ag	92.50%	95%	92.50%	95%	92.5-95%	92.50%	95%
balance an alloy comprised of:			7.50%	5%		7.50%	5%
Zn	24%	34%	2.55%	1.20%	29.75%	2.23%	1.49%
Cu	60%	74%	5.55%	3.00%	62.15%	4.66%	3.11%
Si	0.5%	1.8%	0.14%	0.03%	1.35%	0.10%	0.07%
Sn	0%	8%	0.60%	0.00%	6.75%	0.51%	0.34%

Table 1: Alloying Ranges Of (amended) Claim 1

	cl. 1, 17	cl. 2	cl. 3	cl. 4 and 7	cl. 5	cl. 6, 8	Eccles	Bernhard
Ag	92.5-95%	92.5-95%	92.5-95%	92.5-95%	92.5-95%	92.5-95%	preferably >92.5% Ag	89-93.5%
Balance (assumed 5-7.5%):								
Zn	1.5-2.2%	1.1-1.9%	1.5-2.6%	1.5-2.2%	1.2-1.8%	1.6-2.5%	0.05-5%	0.5-5%
Cu	3.1-4.7%	3.5-5.9%	3.1-5.1%	3.1-4.7%	3.7-5.6%	3.2-4.9%	0.5-6%	0.5-6%
Si	0.07-0.10%	0.06-0.09%	0.03-0.05%	0.07-0.10%	0.06-0.09%	0.03-0.05%	0.02-2.0%	0.02-2%
Sn	0.3-0.5%		0.01-0.02%	0.3-0.5%		0.05-0.07%	0.25-6%	0.25-6%
In			0.04-0.06%			0.06-0.09%	opt. 0.01-1.5%	0.01-1.25%
other							0.01-2.0% Ge	0.001-2% B

Table 2: Approximate Net Alloying Ranges vs. prior art

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eccles (US 6,726,877 B1) or Bernhard et al (US 5,039,479).

Eccles teaches a Ag alloy comprising: $\geq 92.5\%$ Ag, 2-4% Cu, 2-4% Zn, 0.25-6% Sn, 0.02-2% Si (see Eccles at claims 3, 4, 8, 10, see Table 2 above), which overlaps the presently claimed alloy composition (instant claims 17-25). Similarly, Bernhard teaches a Silver based alloy that overlaps the instant net alloying ranges. Bernhard teaches the addition of 0.001-2% B, and Eccles teaches the addition of 0.01-2% Ge to said alloy, however, it is not clear that these additions are not excluded by the instant claim language.

The net alloying ranges of instant claims 17-25 are given in Tables 3-5 below. Because of the broad overlap in alloying ranges, it is held that Eccles or Bernhard has created a prima facie case of obviousness of the presently claimed invention.

	claims 17, 18, 19		net alloy	
	min.	max.	min.	max.
Ag	92.50%	95%	92.50%	95%
balance an alloy comprised of:			7.50%	5%
Zn	24%	34%	2.55%	1.20%
Cu	60%	74%	5.55%	3.00%
Si	0.5%	1.8%	0.14%	0.03%
Sn (18)	0%	8%	0.60%	0.00%
In (19)	0.85%	0.95%	0.07%	0.04%

Table 3

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	claim 20, 21, 22		net alloy	
	min.	max.	min.	max.
Ag	92.50%	95%	92.50%	95%
balance an alloy comprised of:			7.50%	5%
Zn	24%	34%	2.55%	1.20%
Cu	60%	74%	5.55%	3.00%
Si	0.5%	1.8%	0.14%	0.03%
In (22)	0.85%	0.95%	0.07%	0.04%
Sn (21)	1.14%	1.26%	0.095%	0.057%

Table 4

	claims 23, 24, 25		net alloy	
	min.	max.	min.	max.
Ag	92.50%	95%	92.50%	95%
balance an alloy comprised of:			7.50%	5%
Zn	30.97	34.23	2.56725	1.5485
Si	0.57	0.63	0.04725	0.0285
Cu	61.46	67.94	5.0955	3.073
In(25)	0.85	0.95	0.07125	0.0425
Sn(24)	1.14	1.26	0.0945	0.057

Table 5

Response to Amendment

10. In the response filed on August 2, 2005 applicant amended claims 1-8 (with respect to the previously considered/entered claims dated 12/20/2004) and submitted new claims 17-25.

Though the limitation “without further hardening elements and blending elements” excludes B and Ge from the instant alloy (thereby overcoming the prior art of Bernhard and Eccles), said limitation is considered new matter (see discussion above).

11. With respect to new claims 17-25, the examiner was unable to determine the scope of said claims, due to the presence of 3 different transitional phrases when referring to the instant alloy composition- “consisting essentially of”, “comprised of”, and “consisting of”. (see discussion above). If applicant intended claim language to be consistent with “consisting

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essentially of' type claim language, and wherein the hardening element consists of only Cu (see suggested claim language above), then the prior art of Eccles will be overcome due to the presence of Ge, which is clearly taught by Eccles to be a hardening element.

12. When the Examiner has established a *prima facie* obviousness, the burden then shifts to the applicant to rebut. *In re Dillon*, 919 F.2d 688, 692, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990) (en banc). Rebuttal may take the form of "a comparison of test data showing that the claimed compositions possess unexpectedly improved properties... that the prior art does not have, that the prior art is so deficient that there is no motivation to make what might otherwise appear to be obvious changes, or any other argument.. that is pertinent." *Id.* at 692-93; USPQ2d 1901.

Applicant has not clearly shown an unobvious difference between the instantly claimed narrow Ag alloy composition and the prior art's broadly overlapping Ag alloy.


Conclusion


13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JCM
October 24, 2005


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PRIMARY EXAMINER
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